



Metadata Standard

The goal of the Standards and Recommendations Committee is to provide recommendations and guidelines to Indiana GIS user communities to facilitate the collection, maintenance and analysis of GIS data; and, to communicate existing federal, state and local data standards. The Data Standards and Recommendation Committee will not recommend software, hardware or operating systems. Furthermore, the Data Standards and Recommendation Committee will not impose any of these recommendations and guidelines as a requirement on any GIS user community.

Recommendation

The Federal Geographic Data Committee (FGDC) has adopted a standard for metadata called the Content Standard for Digital Geospatial Metadata. The Indiana Geographic Information Council has developed a two-tier recommendation based on users ability to conform with the federal standard.

What is the difference between Tier One and Tier Two?

Tier One Recommendation – Fully CSDGM Compliant

The first tier recommendation for metadata is to develop fully FGDC compliant metadata by completing all of the “mandatory” and “mandatory if applicable” sections of the Content Standard for Digital Geospatial Metadata (CSDGM) (<http://www.fgdc.gov/metadata/contstan.html>). This is strongly recommended by the Indiana Geographic Information Council and **may be necessary if you must comply with federal metadata standards.**

Tier Two Recommendation – Indiana Metadata Profile

The Indiana Geographic Information Council recognizes that in some instances resources of State, local, and tribal governments, the private sector, and non-profit organizations may be limited such that full documentation is not possible. In such cases, the Indiana Metadata Profile (Attachment A) is a second tier recommendation for metadata

development. The Indiana Metadata Profile does meet the minimum requirements for FGDC Content Standard for Digital Geospatial Metadata.

The Indiana Metadata Profile is compliant with requirements for submitting metadata to the IndianaMap Data Clearinghouse <http://in-ulib-brayton.ads.iu.edu/MetadataExplorer/>.

What is Metadata?

Metadata – *data documentation* – are a critical component of any GIS project, essential for data sharing, and absolutely vital for protecting an organizations investment in data. The major uses of metadata are:

- to help organize and maintain an organizations internal investment in their GIS data,
- to provide information about an organization's data holdings to data catalogs, clearinghouses, and brokerages, and
- to provide information to process and interpret data received through a transfer from an external source.

Metadata document the content and quality of GIS and other geospatial data, such as databases, maps, and documents. Much like an electronic card catalog for books, there are standards for what gets documented, and how to do it. Metadata for GIS documents who created and owns the data, what the data represent, why it was created, where the data represent geographically, when the data were created and the time period they represent, and how the data was created.

The Indiana Geographic Information Council is recommending two versions of the metadata standard – a fully nationally compliant version, and a “metadata- light” version for Indiana users. By using either of the following recommendations, you can document your data holdings to protect your data investment, and share metadata with others by posting your metadata to the IndianaMap Data Clearinghouse (<http://in-ulib-brayton.ads.iu.edu/MetadataExplorer/>) The metadata standards listed below do not specify what software to use to develop your metadata – there are several free and commercial software packages available to assist you in metadata development. [The](#) Indiana Metadata Profile MS Excel file can be used as a free resource to assist you with metadata creation. .

Background on the CSDGM

OBJECTIVES:

Content Standard for Digital Geospatial Metadata (CSDGM). The objectives of the standard are to provide a common set of terminology and definitions for the documentation of digital geospatial data.

SCOPE:

Executive Order 12906, "Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure," was signed on April 11, 1994, by President William Clinton. Section 3, Development of a National Geospatial Data Clearinghouse, paragraph (b) states: "Standardized Documentation of Data, ... each agency shall document all new geospatial data it collects or produces, either directly or indirectly, using the standard under development by the FGDC, and make that standardized documentation electronically accessible to the Clearinghouse network." This standard is the data documentation standard referenced in the executive order.

The standard was developed from the perspective of defining the information required by a prospective user to determine the availability of a set of geospatial data, to determine the fitness the set of geospatial data for an intended use, to determine the means of accessing the set of geospatial data, and to successfully transfer the set of geospatial data. As such, the standard establishes the names of data elements and compound elements to be used for these purposes, the definitions of these data elements and compound elements, and information about the values that are to be provided for the data elements. The standard does not specify the means by which this information is organized in a computer system or in a data transfer, nor the means by which this information is transmitted, communicated, or presented to the user.